

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: Unknown)
)
Filing Date: Unknown)
)
Priority Date: 21 December 2000)
)
Applicants: JOHNSON, Graham)
)
For: CHANNEL SELECTION PROCEDURE)
FOR MOBILE COMMUNICATION)
DEVICES)

PRELIMINARY AMENDMENT

Director For Patents
Box: New Application
Washington, D.C. 20231

Dear Sir:

This is a preliminary amendment to the enclosed application entitled "Channel Selection Procedure for Mobile Communication Devices" claiming priority to British Patent Application No. 0031174.6 filed 21 December 2000.

In the Specification:

Please amend the specification as follows:

Page 1, after the title, insert the following headers and paragraph:

--CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to British Patent Application No. No. 0031174.6 filed 21 December 2000.

BACKGROUND OF THE INVENTION--

Page 1, lines 7 and, change "utilised" to --utilized--; line 22 change "utilise" to --utilize--.

Page 2, before line 18 insert the Header:

--SUMMARY OF THE INVENTION--

Page 2, line 22, change "characterised" to --characterized--.

Page 3, line 24, change "characterised" to --characterized--.

Page 4, before the first line, insert the following header:

--BRIEF DESCRIPTION OF THE DRAWING--

Page 4, before line 5, add the Header:

--DESCRIPTION OF THE PREFERRED EMBODIMENTS--

Page 5, line 20, change "utilised" to --utilized--.

Page 6 after the last line, insert the following paragraph:

--While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.--

IN THE CLAIMS:

1. (Amended) A method of controlling a mobile communication device to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, [characterised in that] said method [includes] comprising the steps of:

determining where the mobile communication device is in terms of geographical location using [the] a global system for mobile communications [(GSM)] network or similar information[.];

identifying frequency values or ranges available in and/or permitted in said determined geographical location; and

configuring said mobile communication device to be able to operate at said identified frequency values or ranges.

2. (Amended) A method according to claim 1 [characterised in that] wherein one frequency value or range is selected for operation of said mobile communication device.

3. (Amended) A method according to claim 1 [characterised in that] wherein the frequency value or range to which [the] said device is configured corresponds to a frequency value or range stored in memory of [the] said device at which [the] said device can operate.

4. (Amended) A method according to claim 3 [characterised in that] wherein a look-up table is contained in said memory which correlates cell Ids to country codes or other geographical locations.

5. (Amended) A method according to claim 1 [characterised in that] wherein mobile phone network cell identification data is used by software in [the] said device to determine [the] a geographical location.

6. (Amended) A method according to claim 5 [characterised in that] wherein the mobile network directly transmits a country code to [the] said device and/or the appropriate frequency data for the country or geographical location identified.

7. (Amended) A method according to claim 1 [characterised in that] wherein software in [the] said device configures [the] said device to select either a 79 or a 23 channel hop sequence and then specifies a specific channel hop sequence for the correct group of channels for the determined geographical location.

8. (Amended) A method according to claim 7 [characterised in that] wherein ten selectable hopping sequences are defined for selective use with the determined geographical location.

9. (Amended) A method according to claim 8 [characterised in that] wherein five of the selectable hopping sequences are used for the 79 channel hop sequence and five for the 23 channel hop sequence.

10. (Amended) A method according to claim 1 [characterised in that the] wherein said mobile communication device [utilises the] utilizes a Bluetooth system.

11. (Amended) A method according to claim 1 [characterised in the] wherein said mobile communication device is a mobile telephone.

12. (Amended) A mobile communication device having means to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, [characterised in that] said device comprising:

means to determine[s] [the] a geographical location using a global system for mobile communications [GSM] network or similar information[.];

means to identify[ies] frequency values or ranges available and/or permitted in said determined geographical location; and

means to configure[s] said device to be able to operate at said identified frequency values or ranges.

13. (Amended) A device according to claim 12 [characterised in that] wherein one frequency range or value is selected for operation of said device.

14. (Amended) A device according to claim 12 [characterised in that] wherein said device is a Bluetooth device.

15. (Amended) A device according to claim 12 [characterised in that] wherein said device is a mobile telephone.

REMARKS

Attached is the clean version of the claims and new paragraphs as required in Section 1.121(4) (ii).

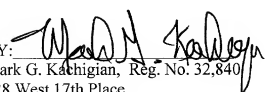
The application should now be in condition for examination, which is respectfully requested.

Respectfully Submitted

HEAD, JOHNSON & KACHIGIAN

Dated: Dec. 20, 2001

BY:


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New Header to be Inserted on Page 1, before line 1:

--CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to British Patent Application No. 0031174.6 filed 21 December 2000.

BACKGROUND OF THE INVENTION

Replacement Paragraphs to be Inserted into Page 1

Mobile Communication Devices are increasingly widespread and one form of communication system, which is increasingly being utilized, is the Bluetooth system. This system allows the transmission of data between devices in a particular range using specific frequencies of transmission at which the devices can communicate/operate. It is also important to note that Bluetooth devices must use the same set of frequencies in order for the two devices to communicate together. Typically the frequency channel used is from a list of available channels and is determined by a pseudo random "hopping sequence" controller until an appropriate and available channel is selected.

Currently, devices which utilize Bluetooth use frequency hopping techniques over a defined set of frequencies. These frequencies vary depending on the country of operation. Typically, 79 possible frequencies are in theory available, but some of the 79 frequencies are used by incumbent services like military and emergency services in countries such as France, Spain, Japan. In these countries it is typical that 23 of the

Header to be inserted into Page 2

SUMMARY OF THE INVENTION

Replacement Paragraph to be Inserted in Page 2:

According to a first aspect of the present invention there is provided a method of controlling a mobile communication device to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, characterized in that said method includes the steps of determining where the mobile communications device is in terms of geographical location using the global system for mobile communication (GSM) network or similar information, identifying frequency values or ranges available and/or permitted in said determined geographical location and configuring said mobile communication device to be able to operate at said identified frequency value or ranges.

Replacement Paragraph to be Inserted into Page 3

According to a second aspect of the present invention there is provided a mobile communication device having means to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, characterized in that said device determines the geographical location using GSM network or similar information, identifies frequency values or ranges available and/or permitted in said determined geographical location and configures said device to operate at said identified frequency values or ranges.

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Headers to be Inserted into Page 4

BRIEF DESCRIPTION OF THE DRAWINGS

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Replacement Paragraph for Page 5

Thus, in a practical example of the invention, a user of a mobile device such as a mobile telephone, purchases the device in a first country. The device is Bluetooth enabled thus allowing the same to be utilized with a Bluetooth communication system and other enabled devices within a certain area.

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New Paragraph for Page 6 to be Inserted After the Last Line:

While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.

Clean Version of the Claims

1. (Amended) A method of controlling a mobile communication device to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, said method comprising the steps of:

determining where the mobile communication device is in terms of geographical location using a global system for mobile communications network or similar information;

identifying frequency values or ranges available in and/or permitted in said determined geographical location; and

configuring said mobile communication device to be able to operate at said identified frequency values or ranges.

2. (Amended) A method according to claim 1 wherein one frequency value or range is selected for operation of said mobile communication device.

3. (Amended) A method according to claim 1 wherein the frequency value or range to which said device is configured corresponds to a frequency value or range stored in memory of said device at which said device can operate.

4. (Amended) A method according to claim 3 wherein a look-up table is contained in said memory which correlates cell Ids to country codes or other geographical locations.

5. (Amended) A method according to claim 1 wherein mobile phone network cell identification data is used by software in said device to determine a geographical location.

6. (Amended) A method according to claim 5 wherein the mobile network directly transmits a country code to said device and/or the appropriate frequency data for the country or geographical location identified.

7. (Amended) A method according to claim 1 wherein software in said device configures said device to select either a 79 or a 23 channel hop sequence and then specifies a specific channel hop sequence for the correct group of channels for the determined geographical location.

8. (Amended) A method according to claim 7 wherein ten selectable hopping sequences are defined for selective use with the determined geographical location.

9. (Amended) A method according to claim 8 wherein five of the selectable hopping sequences are used for the 79 channel hop sequence and five for the 23 channel hop sequence.

10. (Amended) A method according to claim 1 wherein said mobile communication device utilizes a Bluetooth system.

11. (Amended) A method according to claim 1 wherein said mobile communication device is a mobile telephone.

12. (Amended) A mobile communication device having means to operate at or over one or more pre-determined frequency values or ranges depending on the geographical location, said device comprising:

means to determine a geographical location using global system for mobile

communications network or similar information;

means to identify frequency values or ranges available and/or permitted in said determined geographical location; and

means to configure said device to be able to operate at said identified frequency values or ranges.

13. (Amended) A device according to claim 12 wherein one frequency range or value is selected for operation of said device.

14. (Amended) A device according to claim 12 wherein said device is a Bluetooth device.

15. (Amended) A device according to claim 12 wherein said device is a mobile telephone.